

G1 CH2, CH, A, C, N, O, S, P, Si

Structure attributes must be viewed using STN Express query preparation.

=> s l1

SAMPLE SEARCH INITIATED 10:53:33 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 221 TO ITERATE

100.0% PROCESSED 221 ITERATIONS

1 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 3529 TO 5311

PROJECTED ANSWERS: 1 TO 80

L2 1 SEA SSS SAM L1

=> s l1 sss full

FULL SEARCH INITIATED 10:53:39 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 4381 TO ITERATE

100.0% PROCESSED 4381 ITERATIONS

26 ANSWERS

SEARCH TIME: 00.00.01

L3 26 SEA SSS FUL L1

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

185.88

186.10

FILE 'CAPLUS' ENTERED AT 10:53:44 ON 17 JUN 2009

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FILE COVERS 1907 - 17 Jun 2009 VOL 150 ISS 25  
FILE LAST UPDATED: 15 Jun 2009 (20090615/ED)  
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Apr 2009  
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Apr 2009

CAlus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

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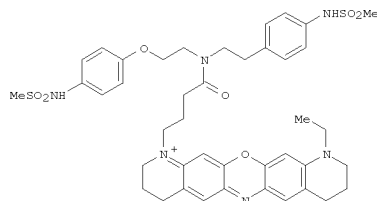
This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l3

L4 7 L3

=> d ibib abs hitstr tot

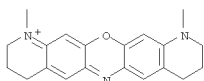
L4 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2007:583643 CAPLUS  
 DOCUMENT NUMBER: 147:202899  
 TITLE: Fluorescently Labeled Analogues of Dofetilide as High-Affinity Fluorescence Polarization Ligands for the Human Ether-a-go-go-Related Gene (hERG) Channel  
 AUTHOR(S): Singleton, David H.; Boyd, Helen; Steidl-Nichols, Jill  
 CORPORATE SOURCE: V.; Deacon, Matt; de Groot, Marcel J.; Price, David; Nettleton, David O.; Wallace, Nora K.; Troutman, Matthew D.; Williams, Christine; Boyd, James G. Exploratory Medicinal Sciences and ADME Technology Group, Pfizer Global Research and Development, Groton, CT, 06340, USA  
 SOURCE: Journal of Medicinal Chemistry (2007), 50(13), 2931-2941  
 CODEN: JMCMAR; ISSN: 0022-2623  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 147:202899  
 GI



AB Novel fluorescent derivs. of dofetilide (1) have been synthesized. Analogs that feature a fluorescent probe attached through an aliphatic spacer to the central tertiary nitrogen of 1 have high affinity for the hERG channel, and affinity is dependent on both linker length and pendent dye. These variables have been optimized to generate Cy3B derivative (I), which has hERG channel affinity equivalent to that of dofetilide. When bound to cell membranes expressing the hERG channel, I shows a robust increase in fluorescence polarization (FP) signal. In a FP binding assay using I as tracer ligand, K<sub>i</sub> values for several known hERG channel blockers were measured and excellent agreement with the literature K<sub>i</sub> values was observed

L4 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2009 ACS on STN (Continued)

PAGE 2-A



CM 2

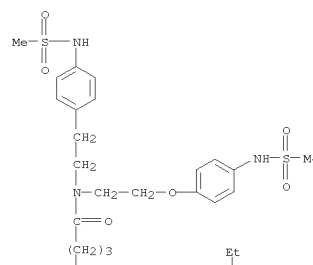
CRN 76-05-1  
 CMF C2 H F3 O2



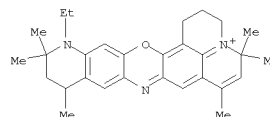
REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE  
 FORMAT

L4 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2009 ACS on STN (Continued)  
 over an affinity range of 2 nM to 3 μM. I blocks hERG channel current in electrophysiol. patch clamp expts., and computational docking expts. predict that the dofetilide core of I binds hERG channel in a conformation similar to that previously predicted for 1. These analogs enable high-throughput hERG channel binding assays that are rapid, economical, and predictive of test compds.' potential for prolonged QT liabilities.  
 IT 944919-96-4P  
 RL: PRP (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
 (fluorescently labeled analogs of dofetilide as high-affinity fluorescence polarization ligands for human ether-a-go-go-related gene (hERG) channel)  
 RN 944919-96-4 CAPLUS  
 CN 2H-Dipyrido[3,2-b:2',3'-i]phenoxazininium, 11-ethyl-3,4,8,9,10,11-hexahydro-1-[4-[[2-[4-[(methylsulfonyl)amino]phenoxy]ethyl][2-[4-[(methylsulfonyl)amino]phenyl]ethyl]amino]-4-oxobutyl]-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)  
 CM 1  
 CRN 944919-95-3  
 CMF C42 H51 N6 O7 S2

PAGE 1-A

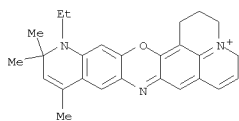


L4 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2005:454377 CAPLUS  
 DOCUMENT NUMBER: 143:468879  
 TITLE: Lasing properties of novel near-infrared laser dyes  
 AUTHOR(S): Venner, Mark R.; Case, Antony D.; Fulker, David J.; Griffiths, John; Mama, John  
 CORPORATE SOURCE: Sensors, Processing and Integration Cent., QinetiQ, Farnborough, GU14 0LX, UK  
 SOURCE: Proceedings of SPIE-The International Society for Optical Engineering (2005), 5707(Solid State Lasers XIV: Technology and Devices), 227-236  
 CODEN: PSISDG; ISSN: 0277-786X  
 PUBLISHER: SPIE-The International Society for Optical Engineering  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB A number of novel near IR oxazine laser dyes have been designed, synthesized and purified. The photophys. and lasing properties of these near IR laser dyes are reported in this paper. The dyes have been found to exhibit moderately high fluorescence quantum efficiencies. Laser testing has been undertaken on the novel oxazine dyes and the results have been compared with those obtained with com. available near IR laser dyes.  
 IT 864058-78-6P, OX 11  
 RL: PRP (Properties); PUR (Purification or recovery); SPN (Synthetic preparation); PREP (Preparation)  
 (OX 11; design, synthesis, and purification of novel near IR oxazine laser dyes with its photophys. and lasing properties)  
 RN 864058-78-6 CAPLUS  
 CN 1H,5H-Pyrido[2,3-i]quinolizino[1,9-bc]phenoxazin-4-ium, 14-ethyl-2,3,11,12,13,14-hexahydro-5,5,7,11,13,13-hexamethyl- (9CI) (CA INDEX NAME)

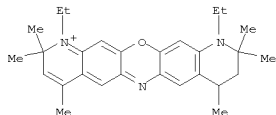


IT 864058-79-7P, OX 12  
 RL: PRP (Properties); PUR (Purification or recovery); SPN (Synthetic preparation); PREP (Preparation)  
 (OX 12; design, synthesis, and purification of novel near IR oxazine laser dyes with its photophys. and lasing properties)  
 RN 864058-79-7 CAPLUS  
 CN 1H,5H-Pyrido[2,3-i]quinolizino[1,9-bc]phenoxazin-4-ium, 14-ethyl-2,3,13,14-tetrahydro-11,13,13-trimethyl- (9CI) (CA INDEX NAME)

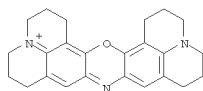
L4 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2009 ACS on STN (Continued)



IT 864058-80-0P, OX 13  
 RL: PRP (Properties); PUR (Purification or recovery); SPN (Synthetic preparation); PREP (Preparation)  
 (OX 13; design, synthesis, and purification of novel near IR oxazine laser dyes with its photophys. and lasing properties)  
 RN 864058-80-0 CAPLUS  
 CN 2H-Dipyrido[3,2-b:2',3'-i]phenoxazininium, 1,11-diethyl-8,9,10,11-tetrahydro-2,2,4,8,10,10-hexamethyl- (CA INDEX NAME)



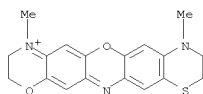
IT 145875-95-2P, OX 14  
 RL: PRP (Properties); PUR (Purification or recovery); SPN (Synthetic preparation); PREP (Preparation)  
 (OX 14; design, synthesis, and purification of novel near IR oxazine laser dyes with its photophys. and lasing properties)  
 RN 145875-95-2 CAPLUS  
 CN 1H,5H,11H,15H-Diquinolizino[1,9-bc:1',9'-hi]phenoxazin-4-ium, 2,3,6,7,12,13,16,17-octahydro- (9CI) (CA INDEX NAME)



IT 864058-81-1P, OX 16  
 RL: PRP (Properties); PUR (Purification or recovery); SPN (Synthetic

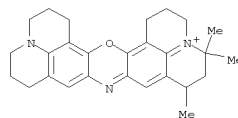
L4 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2005:389474 CAPLUS  
 DOCUMENT NUMBER: 143:93152  
 TITLE: In vivo detection of amyloid- $\beta$  deposits by near-infrared imaging using an oxazine-derivative probe  
 AUTHOR(S): Hintersteiner, Martin; Enz, Albert; Frey, Peter; Jaton, Anne-Lise; Kinzy, Willy; Kneuer, Rainer; Neumann, Ulf; Rudin, Markus; Staufenberg, Matthias; Stoeckli, Markus; Wiederhold, Karl-Heinz; Gremlich, Hans-Ulrich  
 CORPORATE SOURCE: Discovery Technologies, Novartis Institutes for Biomedical Research, Basel, CH-4002, Switz.  
 SOURCE: Nature Biotechnology (2005), 23(5), 577-583  
 CODEN: NABTF9; ISSN: 1087-0156  
 PUBLISHER: Nature Publishing Group  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB As Alzheimer's disease pathogenesis is associated with the formation of insol. aggregates of amyloid  $\beta$ -peptide, approaches allowing the direct, noninvasive visualization of plaque growth in vivo would be beneficial for biomedical research. Here we describe the synthesis and characterization of the near-IR fluorescence oxazine dye AOI987, which readily penetrates the intact blood-brain barrier and binds to amyloid plaques. Using near-IR fluorescence imaging, we demonstrated specific interaction of AOI987 with amyloid plaques in APP23 transgenic mice in vivo, as confirmed by postmortem anal. of brain slices. Quant. anal. revealed increasing fluorescence signal intensity with increasing plaque load of the animals, and significant binding of AOI987 was observed for APP23 transgenic mice aged 9 mo and older. Thus, AOI987 is an attractive probe to noninvasively monitor disease progression in animal models of Alzheimer disease and to evaluate effects of potential Alzheimer disease drugs on the plaque load.  
 IT 856221-51-7P, ASG 236 856221-53-9P, ASG 237 856221-55-1P, AMQ 987  
 RL: DGN (Diagnostic use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (amyloid- $\beta$  deposits detection by near-IR imaging with oxazine-derivative probe for Alzheimer's monitoring)  
 RN 856221-51-7 CAPLUS  
 CN 2H-1,4-Oxazino[2,3-b][1,4]thiazino[3,2-i]phenoxazininium, 3,8,9,10-tetrahydro-4,8-dimethyl-, tetrafluoroborate(1-) (1:1) (CA INDEX NAME)  
 CM 1  
 CRN 856221-50-6  
 CMF C18 H18 N3 O2 S



Habte

L4 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2009 ACS on STN (Continued)  
 preparation); PREP (Preparation)  
 (OX 16; design, synthesis, and purifn. of novel near IR oxazine laser dyes with its photophys. and lasing properties)  
 RN 864058-81-1 CAPLUS  
 CN 1H,5H,11H,15H-Diquinolizino[1,9-bc:1',9'-hi]phenoxazin-4-ium, 2,3,6,7,12,13,16,17-octahydro-5,5,7-trimethyl- (9CI) (CA INDEX NAME)



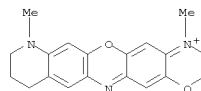
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L4 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2009 ACS on STN (Continued)

CM 2  
 CRN 14874-70-5  
 CMF B F4  
 CCI CCS



RN 856221-53-9 CAPLUS  
 CN 1,4-Oxazino[2,3-b]pyrido[2,3-i]phenoxazininium, 2,3,8,9,10,11-hexahydro-4,8-dimethyl-, tetrafluoroborate(1-) (1:1) (CA INDEX NAME)  
 CM 1  
 CRN 856221-52-8  
 CMF C19 H20 N3 O2



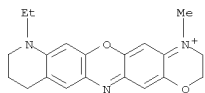
CM 2  
 CRN 14874-70-5  
 CMF B F4  
 CCI CCS



RN 856221-55-1 CAPLUS  
 CN 1,4-Oxazino[2,3-b]pyrido[2,3-i]phenoxazininium, 8-ethyl-2,3,8,9,10,11-hexahydro-4-methyl-, tetrafluoroborate(1-) (1:1) (CA INDEX NAME)  
 CM 1  
 CRN 856221-54-0

06/17/2009

L4 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2009 ACS on STN (Continued)  
CMF C20 H22 N3 O2



CM 2

CRN 14874-70-5  
CMF B F4  
CCI CCS



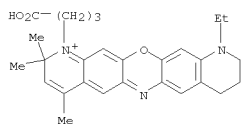
REFERENCE COUNT: 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR  
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L4 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2001:558383 CAPLUS  
DOCUMENT NUMBER: 135:295628  
TITLE: Photophysical Dynamics of Single Molecules Studied by Spectrally-Resolved Fluorescence Lifetime Imaging Microscopy (SFLIM)  
AUTHOR(S): Tinnefeld, Philip; Herten, Dirk-Peter; Sauer, Markus  
CORPORATE SOURCE: Physikalisch-Chemisches Institut, Universitaet Heidelberg, Heidelberg, 69120, Germany  
SOURCE: Journal of Physical Chemistry A (2001), 105(34), 7989-8003  
CODEN: JPACAFH; ISSN: 1089-5639  
PUBLISHER: American Chemical Society  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB A new scanning technique for simultaneous recording of intensity, fluorescence lifetime, and spectral information with single mol. sensitivity is presented. The photophys. parameters were studied and compared of single oxazine (JA242), Rhodamine (JF9), and carbocyanine (Cy5) derivs. adsorbed on glass surfaces under air-equilibrated conditions. SFLIM is ideally suited to reveal subpopulations in inhomogeneous samples and mixts. To obtain a more detailed insight into the underlying fluorescence dynamics of single mols., the fluorescence characteristics of the 3 different chromophores were studied positioning isolated mols. in the laser focus. Two detectors with 2 PC plug-in cards for time-correlated single-photon counting (TCSPC) were used to monitor fluorescence intensity, lifetime, and spectral information simultaneously with single-mol. sensitivity and microseconds to milliseconds time resolution. Discrete jumps in fluorescence intensity from single mols. which lacked spectral diffusion and changes in radiative lifetime were observed with correlation times (triplet lifetimes) spanning several orders of magnitude (from 2 μs for the rhodamine derivative up to several seconds for the oxazine dye) and amplitude. For the carbocyanine derivative Cy5, fast spectral fluctuations to red shifted dim-states which appear partly as off-states with a lifetime in the millisecond range were determined. These dim-states exhibit the same radiative decay rate of .apprx.2 ns as the normal on-state. The results imply that a direct correlation between the radiative decay time and spectral fluctuations is not necessarily given in each of the 3 chromophores. Both parameters seem to be independent characteristic of each individual mol. About 5-15% of all mols. independent of the dye structure, resp., exhibited a constant emission spectrum but strong fluctuations in fluorescence lifetime directly correlated to the intensity. A combined anal. of emission spectrum, intensity and radiative decay rate is a valuable approach for classification and quantification of the underlying photophys. dynamics. IT 185213-69-8, 2H-Dipyrido[3,2-b:2',3'-i]phenoxazinium, 1-(3-carboxypropyl)-11-ethyl-8,9,10,11-tetrahydro-2,2,4-trimethyl-RL: MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process); USES (Uses) (fluorescence lifetime imaging microscopy of single mols. of)

L4 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2009 ACS on STN (Continued)  
RN 185213-69-8 CAPLUS  
CN 2H-Dipyrido[3,2-b:2',3'-i]phenoxazinium, 1-(3-carboxypropyl)-11-ethyl-8,9,10,11-tetrahydro-2,2,4-trimethyl- (CA INDEX NAME)



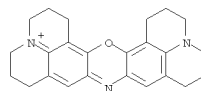
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L4 ANSWER 5 OF 7 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1999:217969 CAPLUS  
DOCUMENT NUMBER: 130:296654  
TITLE: Preparation and characterization of bridged naphthoxazinium salts  
AUTHOR(S): Kanitz, Andreas; Hartmann, Horst  
CORPORATE SOURCE: Fachbereich Chemie, Fachhochschule Merseburg, Merseburg, D-06217, Germany  
SOURCE: European Journal of Organic Chemistry (1999), (4), 923-930  
CODEN: EJOCFK; ISSN: 1434-193X  
PUBLISHER: Wiley-VCH Verlag GmbH  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 130:296654  
AB Various bridged naphthoxazinium perchlorates were prepared by condensation of bridged 4-(aryloxy)-3-hydroxyanilines and bridged or unbridged 4-(aryloxy)-1-naphthylamines with bridged 1-naphthylamines and 3-aminophenols, resp., in the presence of HClO4. The spectral properties of the products were compared with those of bridged phenoxazinium salt as well as with data for some unbridged analogs. IT 223268-10-8P  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation) (preparation and UV absorption and fluorescence of bridged naphthoxazinium salts)  
RN 223268-10-8 CAPLUS  
CN 1H,5H,11H,15H-Diquinolizino[1,9-bc:1',9'-hi]phenoxazin-4-ium, 2,3,6,7,12,13,16,17-octahydro-, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 145875-95-2  
CMF C24 H26 N3 O



CM 2

CRN 14797-73-0  
CMF C1 O4

L4 ANSWER 5 OF 7 CAPLUS COPYRIGHT 2009 ACS on STN (Continued)



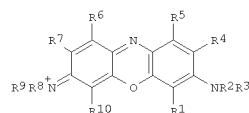
REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

L4 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1997:67333 CAPLUS  
DOCUMENT NUMBER: 126:76137  
ORIGINAL REFERENCE NO.: 126:14719a,14722a  
TITLE: Oxazine dyes, their preparation and their use as fluorescent labels in biological assay  
INVENTOR(S): Herrmann, Rupert; Josel, Hans-Peter; Drexhage, Karl-Heinz; Marx, Nicolaas-Joseph  
PATENT ASSIGNEE(S): Boehringer Mannheim GmbH, Germany  
SOURCE: Eur. Pat. Appl., 12 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 747447	A2	19961211	EP 1996-109101	19960606
EP 747447	A3	19970618		
EP 747447	B1	20010816		
R: DE, ES, FR, GB, IT				
DE 19521231	A1	19961212	DE 1995-19521231	19950610
ES 2161945	T3	20011216	ES 1996-109101	19960606
JP 09003343	A	19970107	JP 1996-147691	19960610
US 20030224421	A1	20031204	US 2003-407768	20030403
PRIORITY APPLN. INFO.:				DE 1995-19521231 A 19950610
				US 1996-662713 B3 19960610
				US 1998-141950 A3 19980828

OTHER SOURCE(S): MARPAT 126:76137  
GI



I

AB The oxazine derivs. (I; R1, R4, R5, R6, R7, R10 = H, alkyl, hydroxy, halogen, carboxy, sulfo, amino; R2, R3 = H, organic group; R1R2, R2R3, or R3R4 may form heterocyclic rings with N; R8, R9 = H, organic group; R7R8, R8R9, or R9R10 may form heterocyclic rings with N; ≥1 of R2, R3, R8, R9 is not in ring form and is capable of coupling and ≥1 of R2, R3, R8, R9 is in optionally substituted ring form) are obtained by cyclocondensation of 3-aminophenols with 2-nitroso-5-aminophenols. I and their conjugates with biochems. may be used for immunoassay or DNA anal.

L4 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2009 ACS on STN (Continued)

Thus, Et γ-(7-hydroxy-1,2,3,4-tetrahydro-1-quinolinyl)butyrate was cyclocondensed in EtOH with N-ethyl-7-hydroxy-6-nitroso-1,2,3,4-tetrahydroquinoline to give an Et ester product which was hydrolyzed to a carboxylate zwitterionic form. This form was converted to the N-hydroxysuccinimide ester and then to a digoxin conjugate.

IT 185213-58-5P 185213-66-5P 185213-70-1P  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(preparation of oxazine dyes for fluorescent labels for biol. anal.)

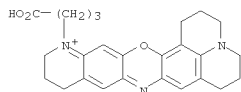
RN 185213-58-5 CAPLUS  
CN 1H,5H,11H-Pyrido[2,3-i]quinolizino[1,9-bc]phenoxazinium,  
14-(3-carboxypropyl)-2,3,6,7,12,13-hexahydro-, tetrafluoroborate(1-)  
(1:1)

(CA INDEX NAME)

CM 1

CRN 185213-57-4

CMF C25 H28 N3 O3



CM 2

CRN 14874-70-5

CMF B F4

CCI CCS



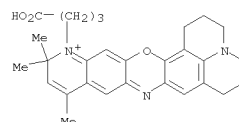
RN 185213-66-5 CAPLUS  
CN 1H,5H,13H-Pyrido[2,3-i]quinolizino[1,9-bc]phenoxazinium,  
14-(3-carboxypropyl)-2,3,6,7-tetrahydro-11,13,13-trimethyl-,  
tetrafluoroborate(1-) (1:1) (CA INDEX NAME)

CM 1

CRN 185213-65-4

CMF C28 H32 N3 O3

L4 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2009 ACS on STN (Continued)



CM 2

CRN 14874-70-5

CMF B F4

CCI CCS

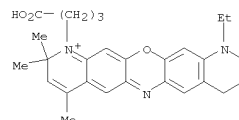


RN 185213-70-1 CAPLUS  
CN 2H-Dipyrido[3,2-b:2',3'-i]phenoxazinium,  
1-(3-carboxypropyl)-11-ethyl-8,9,10,11-tetrahydro-2,2,4-trimethyl-,  
tetrafluoroborate(1-) (1:1) (CA INDEX NAME)

CM 1

CRN 185213-69-8

CMF C27 H32 N3 O3



CM 2

CRN 14874-70-5

CMF B F4

CCI CCS

L4 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2009 ACS on STN (Continued)



L4 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1993:90362 CAPLUS  
 DOCUMENT NUMBER: 118:90362  
 ORIGINAL REFERENCE NO.: 118:15675a,15678a  
 TITLE: Oxazine laser dyes  
 INVENTOR(S): Hammond, Peter R.; Field, George F.  
 PATENT ASSIGNEE(S): United States Dept. of Energy, USA  
 SOURCE: U.S., 6 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5149807	A	19920922	US 1991-761559	19910918

PRIORITY APPLN. INFO.:

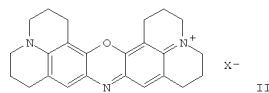
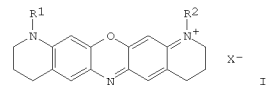
US 1991-761559

19910918

OTHER SOURCE(S):

MARPAT 118:90362

GI



AB Comps. described by the general formulas I and II are described (R1 and R2 are independently selected from C1-10 linear and branched alkyl and fluoroalkyl groups; and X- an anion). The comps. may be used as laser dyes emitting in the 700-800 nm region.

IT 145875-96-3P

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation and use of, as laser dye)

RN 145875-96-3 CAPLUS

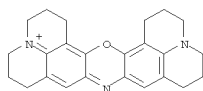
CN 1H,5H,11H,15H-Diquinolizino[1,9-bc:1',9'-hi]phenoxazin-4-ium,  
 2,3,6,7,12,13,16,17-octahydro-, tetrafluoroborate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 145875-95-2

CMF C24 H26 N3 O

L4 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2009 ACS on STN (Continued)



CM 2

CRN 14874-70-5

CMF B F4

CCI CCS



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE  
 FORMAT